Remarks:

Reconsideration of the present application is respectfully requested. Claims 44-47, 55-58, 62-65, and 120-123 are currently pending. Claims 44, 55, 62, and 120 are independent. None of the claims have been amended and, in the Office Action, claims 55-58, 62-65, and 120-123 were rejected under 35 U.S.C. § 112, first paragraph, because the subject matter therein was allegedly not described sufficiently. Specifically, the language of the above claims that reference sequences that are homologous to SEQ ID NO: 14 were objected to because these sequences allegedly did not "meet the written description provision of 35 USC 112, first paragraph" (Office Action, p. 1, ¶4) and therefore, the specification did not convey to those of skill in the art that applicants had possession of the claimed invention.

Applicants submit that the rejected claims meet the requirements of 35 U.S.C. § 112, first paragraph. "To satisfy the written description requirement, an applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention, and that the invention, in that context, is whatever is now claimed." MPEP § 2163.02. The claims objected to define the invention in terms of sequences having a particular percentage sequence homology of SEQ ID NO: 14. What is meant by "sequence homology" is defined distinctly on page 18, lines 8-17 of the present application. In essence, sequence homology as defined for the purposes of this application is the degree of similarity between two DNA sequences in light of the amino acid sequences that are coded for. That is, two DNA sequences with 100% sequence homology may have a different sequence of nucleotides, but express either the same protein or a similar protein with virtually identical structure and function. Similarly, two DNA sequences can have less than 100% sequence homology, but still express a protein having the same function. Thus, the use of percentage sequence homologies to define the invention takes into

account natural variations in DNA sequences that still code for proteins identifiable as CD 151, thereby protecting the full scope of the invention. The definition provided in the specification also included distinctly defined methods of determining sequence relationships, which are spelled out in detail on page 16, line 15 through page 18, line 7. Upon reviewing the claims in light of this detailed definition of sequence homology, one skilled in the art would find that Applicants had possession of the claimed invention as of the filing date. The application defines simian (SEQ ID No: 1) and porcine CD 151 (SEQ ID No: 14) and keep other known CD 151 sequences. Furthermore, the specification explains why the claimed homology is reasonable in that "porcine CD 151 mRNA has about 84% sequence homology with known CD 151 sequences from monkeys, mice, rats, and humans. However, it was determined that the intron portions of porcine CD 151 shared little to no homology with other known CD 151 intron sequences...due to the lower homology shared between porcine CD 151 and the other known sequences of CD 151, sequences having greater than 84% sequence homology are considered covered by the present invention" (p. 12, lines 15-22). This detailed description in the specification would lead one skilled in the art to conclude that Applicants had possession of the claimed invention at the time the application was filed. Accordingly, applicants respectfully request that this rejection be withdrawn.

Claims 44-47 were rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter. Specifically, it was alleged that the term "CD 151" was not clearly defined. Applicants submit that the term "CD 151" is clearly defined in light of the application disclosure and the interpretation of one possessing ordinary skill in the art.

"Definiteness of claim language must be analyzed, not in a vacuum, but in light of: (A) The content of the particular application disclosure; ... and (C) The claim interpretation that would be

given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made." MPEP § 2173.02. Applicants submit that CD 151 is clearly defined in light of the application. CD 151 is defined in the specification as being a designation for the tetraspan molecule Platelet Endothelial Tetraspan Antigen-3 on page 13, lines 30-31. CD 151 is further clarified as being an RNA binding protein on the surface of animal cells (page 14, lines 4-5). Furthermore, the preferred variations of genomic DNA coding for CD 151 are clearly defined on page 12, line 14 through page 13, line 3 of the present application, where the preferred embodiments of the invention are described as those proteins derived from DNA sequences that share at least an 84% sequence homology with SEQ ID NO: 14. Applicants submit that in light of the context of the application and in light of the clear definition in the specification, one of ordinary skill in the art would have no difficulty ascertaining what is meant by the term "CD 151." Accordingly, Applicants assert that the objection to claims 44-47 under 35 U.S.C. § 112, second paragraph should be withdrawn.

In light of the foregoing, the present application should now be in condition for allowance and a Notice of Allowance is courteously solicited.

Any additional fee due in connection with this amendment should be applied against Deposit Account 19-0522.

Respectfully submitted,

By _____

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